### Newsletter No. 114 May 1998

TO: Members of the Division of Nuclear Physics, APS

FROM: Benjamin F. Gibson, LANL - Secretary-Treasurer, DNP

#### ACCOMPANYING THIS NEWSLETTER:

- APS/AAPT Centennial Meeting Speaker Nomination Form
- DNP Fall Meeting Housing and Registration Forms
- DNP Nomination Ballot



#### Future Deadlines

- 22 June 1998 User Group Deadline in order to appear in the October Bulletin
- 1 July 1998 March Centennial Speaker Nominations
- 1 July 1998 Contributed Abstracts, Santa Fe Fall Meeting
- 1 July 1998 Nomination Ballot for DNP Elections
- 1 July 1998 Nominations for Bonner Prize
- 1 July 1998 Nominations for Bethe Prize
- 1 July 1998 Nominations for Dissertation Award
- 11 September 1998 Santa Fe Housing Deadline
- 11 September 1998 Santa Fe "Special" Registration Rate Deadline

#### WWW Home Page for DNP

A worldwide web home page for the Division of Nuclear Physics is currently available at "http://www.phy.anl.gov/dnp/". Each newsletter is posted on the web, in advance of the copy you receive in the mail. Other information of interest to DNP members, such as deadlines for meetings, prizes, nomination forms, and special announcements are listed there as well. We would like to hear your comments and suggestions. Please send them to Bob Wiringa at "dnp@theory.phy.anl.gov".

#### 1. DNP COMMITTEES

#### Executive Committee

Stuart J. Freedman, UCB/LBNL, Chair (1998)

Walter F. Henning, ANL, Chair-Elect (1998)

R. G. Hamish Robertson, U Washington, Vice Chair (1998)

Bunny C. Clark, OSU, Past Chair (1998)

Benjamin F. Gibson, LANL, Secretary-Treasurer (1998)

Virginia R. Brown, NSF, Past Secretary-Treasurer

John P. Schiffer, ANL, **Divisional Councilor** (December 1999)

J. Dirk Walecka, College of William & Mary, **Divisional** Councilor (December 2001) Jolie A. Cizewski, Rutgers (1998)

Bradley W. Filippone, Caltech (1998)

Claus-Konrad Gelbke, MSU (1998)

Richard Milner, MIT-Bates (1999)

Robert P. Redwine, MIT (1999)

John F. Wilkerson, U. Washington (1999)

#### Program Committee

W. F. Henning, ANL (Chair)

R. G. H. Robertson, U. Washington (Vice Chair)

S. J. Freedman, UCB & LBNL (Past-Chair, 1997)

B. C. Clark, OSU (Past-Chair, 1996)

B. F. Gibson, LANL (Secretary-Treasurer)

R. Carlini, CEBAF

D. Fossan, LBNL

A. Garcia, Notre Dame

J. D. Garrett, ORNL

M. Gyulasey, Columbia

S. Klein, LBNL

K. T. Lesko, LBNL

N. C. R. Makins, U. Illinois

H. D. Meyer, Indiana U.

S. A. Page, U. Manitoba

M. J. Ramsey-Musolf, INT and Connecticut

G. Savard, ANL

S. J. Seestrom, LANL

R. H. Seto, UC Riverside

S. J. Wallace, U. Maryland

G. D. Westfall, MSU

Remaining committees will appear in the August newsletter.

#### INSIDE . . .

- Centennial Meeting Speaker Nominations
- · Call for Officer Nominations
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- On-Line Abstract Submission
- · NSF Proposal Deadline

### 2. FLASH: CENTENNIAL INVITED SPEAKER NOMINATIONS DUE 1 JULY

Because of the early deadlines required by the MARCH dates for the 1999 Centennial Meeting in Atlanta, nominations for invited talks must be submitted by 1 July 1998. The invited speaker form is included with this newsletter. Send in your invited speaker nominations for the Centennial when you prepare your contributed paper abstracts for Santa Fe.

### 3. NOMINATIONS OF OFFICERS AND EXECUTIVE COMMITTEE FOR 1999

Terms of the officers and three members of the present Executive Committee will expire at the close of the regular meeting of the Division to be held in conjunction with the APS Centennial meeting in Atlanta, Georgia, March 1999. Walter Henning will become Chair, Hamish Robertson will become Chair-Elect, and Richard Milner, Robert Redwine, and John Wilkerson will remain members of the Executive Committee. A Vice-Chair, Secretary-Treasurer, and three members of the Executive Committee are to be elected before April 1999.

The enclosed nominating ballot must be signed and may be returned in the enclosed envelope with your name and address printed or signed legibly in the upper left hand corner of the envelope. It should be received by **Benjamin F. Gibson** on or before **1 July 1998** in order to be counted. The DNP bylaws require that a nominee proposed for a given post by not fewer than one-fiftieth of the members (50 for this election) shall be deemed nominated to that post.

If you are a DNP member, please exercise your right to nominate candidates for the upcoming DNP elections. In 1998 there were only 92 nomination forms received by the Secretary-Treasurer. More members vote in the DNP elections, but for 1998 only about 700 election ballots were mailed in by members. It is important to vote!

#### **CALL FOR 1999 PRIZE/AWARD NOMINATIONS**

#### 4. 1999 TOM W. BONNER PRIZE

This annual prize was established in 1964 as a memorial to Tom W. Bonner by his friends, students and associates. Previous winners are: H. H. Barschall, R. J. Van de Graaff, C. C. Lauritsen, R. G. Herb, G. Breit, W. A. Fowler, M. Goldhaber, J. D. Anderson and D. Robson, H. Feshbach, D. H. Wilkinson, C. S. Wu, J. P. Schiffer, S. T. Butler and G. R. Satchler, S. Polikanov and V. M. Strutinsky, Roy Middelton and W. Haeberli, R. M. Diamond and F. S. Stephens, B. L. Cohen, G. E. Brown, C. D. Goodman, H. A. Enge, E. G. Adelberger, L. M. Bollinger, B. Frois and I. Sick, R. H. Davis, E. M. Henley, V. W. Hughes, P. Twin, H. G. Blosser and R. E. Pollock, A. Arima and F. Iachello, E. K. Warburton, F. Boehm, J. D. Walecka, R. G. H. Robertson, and J. M. Moss.

The purpose of this prize, which currently consists of \$5,000 and a certificate citing the recipient's contributions, is "To recognize and encourage outstanding experimental research in nuclear physics, including the development of a method, technique, or device that significantly contributes in a general way to nuclear physics research."

Nominations are open to physicists whose work in nuclear physics is primarily experimental, but a particularly outstanding piece of theoretical work will take precedence over experimental work. There are no time limitations on when the work was performed. The prize shall ordinarily be awarded to one person but a prize may be shared among recipients when all the recipients have contributed to the same accomplishment(s).

Nominations remain active for three years. It is extremely helpful for the committee to receive additional letters of support that detail the contributions of the nominee and the impact these contributions have had on the field. It is also appropriate to submit material such as significant articles that might help us evaluate the nominee's contribution. While general statements concerning the value of the nominee's work are important, we must have specific information that allows us to determine what the nominee has contributed and how this contribution has impacted the field.

Send name of proposed candidate and supporting material before *1 July 1998* to: Prof. Peter Paul, Department of Physics, SUNY-Stony Brook, Stony Brook, NY 11794-3800 (paul@nuclear.physics.sunysb.edu).

#### 5. 1999 BETHE PRIZE

This annual prize was established in 1996 by friends, students, and associates of Hans A. Bethe and announced at Bethe's 90th birthday celebration at Cornell. Previous prize winners are: J. Bahcall.

The purpose of the prize, which currently consists of \$7500 and a certificate citing the recipient's contributions, is "To recognize outstanding work in theory, experiment, or observation in the areas of astrophysics, nuclear physics, nuclear astrophysics or closely related fields."

The award is to be made to one individual for outstanding accomplishments in the areas of astrophysics, nuclear physics, nuclear astrophysics, or closely related fields. It is open to any scientist working in these areas, worldwide. No time limits are set on when the work was done.

Nominations remain active for three years. It is extremely helpful for the committee to receive additional letters of support that detail the contributions of the nominee and the impact these contributions have had on the field. It is also appropriate to submit material such as significant articles that might help the committee evaluate the nominee's contribution. While general statements concerning the value of the nominee's work are important, specific information defining what the nominee has contributed and how this contribution has impacted the field is needed.

Send name of proposed candidate and supporting material before *1 July 1998* to: Prof. Virginia Trimble, Astronomy Department, University of Maryland, College Park, MD 20742 (vtrimble@astro.umd.edu).

#### 6. 1999 DISSERTATION AWARD

The now annual award, which recognizes a recent Ph.D. in nuclear physics, was established in 1985 by members and friends of the Division of Nuclear Physics of the APS. Previous winners are: B. Sherrill and W. J. Burger, Thomas E. Cowan, Michael J. Musolf,

James Edward Koster, Zhiping Zhao, Greg Schmid, and Yury G. Kolomensky.

**Nature:** The award consists of \$1000 and an allowance for travel to the annual Spring Meeting of the Division of Nuclear Physics of the American Physical Society at which the award will be presented.

**Rules and Eligibility:** Nominations are open to any person who has received a Ph.D. degree in experimental or theoretical nuclear physics from a North American university within the two-year period preceding 1 September 1998.

Send before 1 July 1998 the nomination of the proposed candidate, an up to four page summary of the thesis research, a statement of his/her contribution to the research as well as that of others and a letter of support from the physicists who are familiar with the candidate and the research. To expedite the process, copies of the thesis should be made available for the five committee members. These materials are required for each nominee and should be sent to Prof. S. J. Freedman, Department of Physics, 366 Le Conte Hall, University of California, Berkeley, CA 94720.

#### 7. 1998 PRIMAKOFF LECTURER NAMED

J. Dirk Walecka was named by the APS to give the second annual Primakoff Lecture at the 1998 APS/AAPT Spring Meeting in Columbus, OH.

The Primakoff Lectureship is not a Prize or Award, as are neither the analogous Beller and Marshak Lectureships, but is rather a program designed to bring stellar speakers to APS meetings. The endowed fund pays for the speaker's travel and accommodations plus provides a modest honorarium. The talk is identified at the APS meeting by the Lectureship name.

The APS Primakoff Lectureship was initiated in 1997. C. N. Yang was the first speaker in the series. Friends of Primakoff at the University of Pennsylvania endowed the fund. They also have a similar long standing lecture series running at the University, which has sponsored many exceptional speakers over the years. It is requested that a member of the University of Pennsylvania's Department of Physics chair the Primakoff Lecture. Prof. Gino Segre chaired the 1998 Primakoff Lecture, which was given in the DNP Prize Session at the spring meeting, and introduced Prof. Walecka.

#### 8. FUTURE DNP FALL MEETINGS

1998	October 28–31	Santa Fe, NM
1999	October 13–17	Asilomar, CA
2000	October	Williamsburg, VA

The dates include the Wednesday "workshops," which are held in conjunction with the DNP Fall Meetings. Holding "workshops" at the DNP Fall Meetings is a tradition that began with the 1986 Vancouver meeting. All meeting attendees are welcome and encouraged to come. It has been the intention of the DNP Executive Committees that these "workshops" should have broad appeal, with introductory pedagogical talks for the benefit of those who have come primarily for the DNP meeting but want to take the opportunity to learn about a field of specialty of the local community.

#### 9. FUTURE APS SPRING MEETING INFORMATION

1999	March 20–26	Atlanta, GA
2000	April	Long Beach, CA

The 1999 Centennial celebration will be held 20–26 March in Atlanta. The first two days will be devoted to formal celebrations. The 22–26 March dates will correspond to an annual spring meeting. The year-long centenary celebration will begin in the fall of 1998 and continue until the summer of 1999. The APS contact for the Centennial celebration is Franmarie Kennedy; the chair of the DNP Centennial Committee is J. Dirk Walecka. Walter F. Henning is chairing the DNP Centennial subcommittee, which is arranging DNP displays/exhibits.

## 10. DNP BUSINESS MEETING AT THE 1998 APS/AAPT SPRING MEETING, COLUMBUS, OH, 18-21 APRIL 1998

The Business Meeting of the DNP was held at 17:30 on Sunday, 19 April, in Ballroom 3 of the Columbus Convention Center immediately following the DNP Prize Session. The meeting opened with DNP outgoing Chair Bunny Clark congratulating the Bethe Prize winner, John Bahcall, the Bonner Prize winner, Joel M. Moss, the Maria G. Mayer Prize winner, Elizabeth J. Beise, and the DNP Dissertation Award winner, Yury G. Kolomensky. Fellowship certificates were presented to 13 members of the DNP: Maria-Ester Brandan, Moshe Gai, Paul Henri Heenen, John W. Lightbody, Keh-Fei Liu, Charles Felix Maguire, Eugene Richard Marshalek, Glen Anderson Rebka, Jr., Dennis Michael Skopik, Mark Strikman, John Franklin Wilkerson, William A. Zajc, and Vladimir G. Zelevinsky.

Bunny Clark thanked the other officers and the Executive Committee members with whom she had worked during her tenure in the officer line. She then turned the gavel over to Stuart J. Freedman, incoming DNP Chair.

The incoming DNP Program Chair, Walter F. Henning, reported on plans for the 1998 fall meeting in Santa Fe, as well as preliminary plans for the APS/AAPT Centennial meeting in Atlanta, Georgia. (See Item #12 for details of the meeting.)

Bob Eisenstein, Director of the MPS at the NSF, then spoke to the membership on "Mathematics and the Physical Sciences in the 21st Century." His traveling to Columbus to address the DNP Executive Committee as well as the DNP Business Meeting is greatly appreciated.

The membership then heard reports from Dennis Kovar of the DOE and from Brad Keister of the NSF on the status of nuclear physics from the agency point of view.

## 11. DNP FALL MEETING AT SANTA FE, NEW MEXICO, 29–31 OCTOBER 1998

#### General Information

The Annual Fall Meeting of the Division of Nuclear Physics of the American Physical Society will be held October 29–31, 1998 in Santa Fe, New Mexico. Three associated topical workshops will be held on October 28. Santa Fe is a scenic one-hour drive north of Albuquerque International Airport. Santa Fe is the oldest capital city

in the United States, founded in 1607, and is unique in its blending of Native American, Hispanic, and Anglo culture. The center of town is the Plaza, a tree-lined park surrounded by businesses and historic churches, much like in traditional European and Latin American cities. La Fonda, the main conference hotel, is located at the southeast corner of the Plaza. At an elevation of 7000 feet, Santa Fe is located in the high mountain desert, in the foothills of the Rocky Mountains. Santa Fe is surrounded by over a million acres of National Forest land, making it the perfect jumping-off point for day hikes, fly-fishing trips, downhill and Nordic skiing, white-water rafting, backpacking, and mountain biking. There are eight Indian Pueblos in northern New Mexico, many located less than an hour from Santa Fe by automobile. During the fall season the weather is variable, with high temperature typically 63F and low about 38F.

#### Meeting Program

The Conference sessions will be held at the Sweeney Convention Center (201 Marcy Street), two blocks northwest of and convenient to the historic downtown plaza. The meeting will consist of a plenary session, five sessions of invited talks, and approximately 25 sessions of contributed papers and mini-symposia. The 1998 Program Committee will arrange two sessions of invited papers on topics selected at the April Program Committee meeting. The Program Committee Chair will arrange two voted sessions. The Local Organizing Committee is organizing a fifth session of invited talks. There will also be three workshops, a business meeting of the Division, meetings of user groups of various accelerator laboratories, a welcome reception on Wednesday, October 28, 1998, a banquet on Friday, October 30, 1997, and a Teachers Day on Saturday October 31, 1998. The deadline for submission of abstracts is 5:00 p.m., EDT, July 1, 1998.

The local organizing committee consists of T. J. Bowles, J. D. Bowman, G. T. Garvey, C. Hoffman, M. Johnson, J. N. Ginnochio, W. Louis, J. Simon-Gillo, S. Wender, and S. J. Seestrom (Chair).

#### Workshops

Three workshops will be held in conjunction with the meeting, on October 28, 1998 and the Workshops will begin at 9:00 a.m. "Physics with the Relativistic Heavy Ion Collider," is being organized by J. Simon-Gillo, J. Sullivan, H. van Hecke, D. Fields, D. Strottman, W. Kinnison, and M. Brooks; "The Spin-Flavor Structure of the Nucleon" is being organized by A. Blotz, G. Garvey, J. Ginocchio, and J. Moss; "New Opportunities for Nuclear Physics with Spallation Neutron Sources," is being organized by R. Haight, W. Tornow, J. Becker, P. Herczeg, and S. Wender. The workshops will run in parallel, and a registration fee of \$30 will be charged, allowing attendance at all three workshops. Registration will begin at 8:00 a.m. on October 28, 1998.

#### User Group Meetings

It is anticipated that various groups will wish to hold user group meetings during the Fall Meeting at the Sweeney Convention Center. To schedule these, avoiding conflicts with other meetings or activities, and to have these announced in the October Bulletin, it will be necessary to make arrangements with the Local Organizing Committee by June 28,1998.

#### Registration

Registration will begin on Wednesday, October 28, 1998, at 8:00 a.m. in the lobby of the Sweeney Convention Center. It will

continue through 7:00 p.m. Starting Thursday, October 29, registration will continue from 8:00 a.m. – 5:00 p.m. in the same location.

The advance registration and hotel deadline is September 11, 1998. The advance registration form is included in this mailing. For meeting information please contact Corinne Tippet, Conference Secretary, DNP98, Mail Stop H803, Los Alamos National Laboratory, Los Alamos, New Mexico, 87545. Email can be sent to <a href="mailto:DNP98@lanl.gov">DNP98@lanl.gov</a>, the web page will be <a href="mailto:http://p23.lanl.gov/dnp98">http://p23.lanl.gov/dnp98</a>, and Fax: 505-984-6679

#### Accommodations

Rooms have been blocked at a number of hotels located within walking distance of the Convention Center. Because Santa Fe is a popular destination during the fall it is recommended that hotel reservations be made early. The deadline for hotel reservations is September 25, 1998. Reservations can be made by mailing or faxing the enclosed hotel reservation form to the Santa Fe Convention and Visitors Bureau, Cyndi Catanach, P.O. Box 909, Santa Fe, NM 87504-0909.

#### Travel Information

Ten major air carriers serve the Albuquerque International Airport and limited service is available to Santa Fe municipal airport. All major rental car agencies have offices at the Albuquerque International Airport. Non-stop bus service is also available about 8 to 10 times daily from the Albuquerque International Airport to Santa Fe by Shuttlejack (505-982-4311). There is also a municipal airport in Santa Fe, which handles all types of private aircraft up to a 727.

#### Paper Submission

Abstracts received via postal mail will be accepted. However, only the title and authors of the paper will appear in the printed version of the Bulletin and on the World Wide Web version of the Bulletin.

Please follow the instructions for the preparation of paper abstracts as they appear in each issue of APS Meeting News. Please send these abstracts to:

Meeting Abstracts – DNP Meeting APS Meetings Department One Physics Ellipse College Park, MD 20740-3844

Please do NOT also send a paper abstract if you are submitting your abstract electronically. All abstracts must be at the headquarters office by the deadline date. APS assumes no responsibility for mail delays. Receipt of paper abstracts will not be confirmed unless accompanied by a self-addressed stamped envelope

#### **DNP98 Sorting Categories:**

- 1. Nuclear Astrophysics
- 2. Electroweak Interactions
- 3. Ultrarelativistic Heavy Ions
- . Nuclear Reactions: Heavy-Ions/Radioactive Beams
- 5. Nuclear reactions: Hadrons/Light Ions
- 6. Nuclear Structure
- 7. Instrumentation
- 8. Sub-Nucleonic Degrees of Freedom
- 9. Nuclear Theory

- 10. Applications of Nuclear Physics
- 11a. Mini-Symposium A: Proton Emitters
- 11b. Mini-Symposium B: Spectroscopy with Gammasphere
- 11c. Mini-Symposium C: Limits from Beta Decay
- 11d. Mini-Symposium D
- 12. Other

#### 12. FALL MEETING MINI-SYMPOSIA

Mini-Symposia will again be a part of the 1998 Fall Meeting in Whistler. Mini-Symposia are focused sessions in which an invited speaker sets the tone for the topic, provides an overview and introduction, highlights new developments, etc. That talk is followed by related contributed papers. Abstracts are submitted in the usual manner; that is, abstracts are submitted to APS HQ electronically as indicated in the instructions in this Newsletter.

To insure that your abstract is considered for the Mini-Symposia in which you wish to participate, it is necessary that your abstract be identified with the appropriate code as indicated below. There is no guarantee that all abstracts submitted for a given Mini-Symposium can be accommodated in that contributed paper session. In the even that more abstracts are received than can be accommodated, the additional abstracts will be assigned to another related contributed paper session.

ID	Session Title	Organizers
11a	Proton Emitters	Gary Westfall
11b	Nuclear Spectroscopy with	David Fossan
	Gammasphere at the Limits	Walter Henning
11c	Testing the Limits of the	Susan Seestrom
	Standard Model with Beta Decay	Stuart Freedman

Any questions regarding the topics should be directed to the session organizers, who are members of your DNP Program Committee.

# 13. ON-LINE ABSTRACT SUBMISSION OFFERS EASY ALTERNATIVE, Danita Boonchaisri (Meetings Publication Coordinator), Jim Egan (Sr. Prog. Analyst), and Joanne Fincham (Webmaster)

Tired of that quirky electronic LaTeX template? Unsure whether your abstract will compile correctly? Afraid your mailer might mangle your masterpiece as it is transmitted through the ether? Thanks to our newly developed on-line abstract submission process, these worries are a thing of the past. If you have access to a forms-capable browser, you can submit a perfectly formatted abstract on-line by answering a few questions.

The Meetings and Information Services Departments of the APS have been working together over the past year to implement a simpler method for submitting electronic abstracts. While it's true that nearly 99% of our abstracts are submitted electronically, it's also true that about 20% contain errors caused by mail programs or improper use of the template. Another 5% are sent to the wrong address. On-line submission will solve these problems and streamline the entire submission process. In addition to accepting abstracts, the on-line submission page also allows submitters to notify the APS of abstract withdrawals.

To submit through the web, an author needs to know two things:

- 1. The number and ordering of authors and collaborations;
- 2. What the abstract should say.

The web page guides you through the rest.

Okay, we lied. If your abstract includes Greek, math, or special characters, you will still need to use LaTeX to format them, but the following URL contains a list of frequently used LaTeX symbols to assist you: http://www.aps.org/meet/instruct.html.

Some things haven't changed:

- We still provide log number assignments by e-mail.
- We still accept the abstract template by e-mail and on paper by regular mail. (Keep in mind that paper abstracts only receive a title and author listing in the Bulletin and on the web.)
- We still send out session assignment notices by e-mail once the on-line program is available for public viewing.

Try a test submission. Log onto http://abstracts.aps.org and select the meeting TEST. Follow the directions on-line to create your own practice abstract.

## 14. BUDGET UPDATE FROM THE AD HOC COMMITTEE ON NUCLEAR PHYSICS FUNDING, L. L. Riedinger

The FY99 budget request to the Congress by the Clinton Administration represents a new emphasis on research, as federal spending for civilian research and development is slated to increase by 6% and for basic research by 9%. The budget request describes a proposed Research Fund for America, which would include \$150B in new initiatives in coming years, including \$31B in FY99. For the National Science Foundation, the requested increase is quite good, 10% to \$3.773B. This includes an 11.8% increase for Research and Related Activities (to \$2.846B), a 10.7% increase for Mathematical and Physical Sciences (to \$792M), and a 15.8% increase to \$171.9M for Physics (with roughly half of this increase slated for new LIGO operating funds). In the Department of Energy, the requested budget for Nuclear Physics is \$332.7M, up by 3.7% (\$12M) over FY98. For comparison, the High Energy Physics budget would be \$691M, up by 1.7%. Basic Energy Sciences (BES) would increase by 25% to \$836M, largely because of a requested \$157M to begin construction of the Spallation Neutron Source in Oak Ridge.

There is much talk on Capitol Hill about this budget request and the associated issues of budget caps, income from the pending tobacco settlement, and \$1.3B of "missing" water projects in the Energy and Water component of the DOE budget. The budget caps still apply to the FY99 federal budget, even though a budget surplus of ever increasing size is projected. The caps limit the emphasis on certain items, such as research. A Physics Today article (April issue) states that \$5.6B of any income from a tobacco settlement is needed to balance the FY99 budget as presented by the Administration. A tobacco settlement looks remote at this time, but that politics could change as the fall elections approach. Concerning the third issue, Congressional leaders estimate that the Administration's request omits perhaps \$1.3B in water projects that were approved last year. In an election year, it would seem likely that many of these would be revisited by Congress. The problem is that DOE Office of Energy Research (Nuclear Physics and High Energy Physics) and BES funding are in the Energy and Water appropriations bill, along with water projects. Clearly, these controversial water items could impact the nuclear physics budget.

Even with the requested \$12M increase for DOE nuclear physics, this budget is still \$10 to 12M below the lower limit of the budget guidance range given to the nuclear physics community at the time

of the writing of the 1996 Long Range Plan. This shortfall leads to difficulties of various types in our field, including the inadequate operating of our accelerator facilities. This led three members of the DNP Funding Committee (Hermann Grunder, Lee Riedinger, and Lee Schroeder) to work with Konrad Gelbke (NSAC chair) and John Marburger (new director of Brookhaven National Laboratory) to develop a request for an additional \$12M to be added by Congress to the DOE nuclear physics budget. This petition was carried in March and April to various members of the House and the Senate Energy and Water Appropriations Subcommittees. The hope is that one or more subcommittee members will take the lead in seeking additional funds for nuclear physics as the Energy and Water bills are written. Markup of this bill will occur first in the House and then in the Senate, likely beginning in early May. Members of the committees are listed in FYI #61 for the House and #60 for the Senate (http://webster.aip.org/enews/fyi/1998/). Grass roots input by anyone from a state represented on these committees can have an impact. (No DOE or NSF funds should be used in providing that input.) Letters in support for these additional \$12M for DOE nuclear physics are most effective if one describes very briefly the nuclear physics research program in the state. Even letters in early June would have an impact, as the appropriations process will remain in flux. The Ad Hoc Committee would appreciate a copy of letters sent: Lee Riedinger, Physics Department, Univ. of Tennessee, Knoxville, TN 37996-1200.

#### 16. ISOTOPE SUPPLY ISSUE, L. L. Riedinger

After a successful three-year period of operation supported by sales revenues, the Calutrons at Oak Ridge National Laboratory have been shut down by the DOE because of declining sales. These Calutrons provide the U.S. domestic supply of enriched stable isotopes for use in research, medicine, and industry. The only equivalent machines in the world are located in Russia. The Russians have overproduced in the past, thus lowering prices of stable isotopes and leaving sales revenues alone insufficient to meet operating costs.

Congressional hearings during the early 1990s identified a similar situation and called for annual appropriations to DOE to provide for the production of rare, nonprofitable isotopes for research uses. Annual appropriations were re-established in FY1995 but have been directed to other uses, such as the formation of a Mo-99 production facility. Thus, the future supply of rare nonprofitable stable isotopes in the U.S. is again in jeopardy. If this situation is not resolved within the next four months, DOE may make the Calutron shutdown decision permanent.

It is important for nuclear physicists to make known their feelings about this situation. Clearly the supply of enriched stable isotopes at reasonable costs is essential to the health of major parts of the experimental nuclear physics program in the U.S. The DOE officer in charge is:

Owen W. Lowe Associate Director, Isotope Production & Distribution Office of Nuclear Energy, Science, and Technology Department of Energy GTN B-432 Germantown, Md 20874-1290

Telephone: 301-903-5161 Fax: 301-903-5434

E-mail: owen.lowe@hq.doe.gov

It would be appreciated if copies of your correspondence on the subject were sent to: Lee L. Riedinger, Physics Department, University of Tennessee, Knoxville, TN 37996-1200

#### 15. DNP AD HOC COMMITTEE ON EDUCATION, M. McMahan

The Nuclear Science Wallchart and Booklet are complete and have now been printed! We thank the National Wallchart Committee led by Howard Matis of LBNL for their hard work. Now the chore is to get the word out to teachers who could make use of the material. If you have contacts in your local high schools, please consider talking to them about the wallchart. In fact, some institutions are buying copies to donate to their local high schools. Ordering information is contained in the table below.

Our next step is to get the wallchart material on the Web. This will become an integral part of the Education and Outreach portion of the DNP Web pages. Also, we are organizing teachers to contribute to an Activities Book to go along with the chart. Suggestions for activities that would lead to an understanding of some part of the chart are welcome; please send them to mcmahan@lbl.gov.

About 95 responses to the DNP Education and Outreach Survey were received. These are being compiled and will be made available on the Web and eventually in printed form. About half the division members who responded are involved in organized efforts by departments or laboratories or national programs. The other half were individual efforts. Scientists who are interested in becoming involved in education and outreach might check out the Resources for Involving Scientists in Education (RISE) homepage at http://www.nas.edu/rise/ for ideas. If you failed to respond to the survey and are involved in education or outreach, there is still time to send a description of your activities to mcmahan@lbl.gov.

Nuclear Science Products\*

Catalog No.	Description	1998 Prices
71960-00	Large Nuclear Science Wallchart,	\$20
	$105 \times 150$ cm	
71960-02	Poster-size Nuclear Science Chart,	\$10
	$53 \times 75$ cm	
71960-30	Pkg. of 30 Notebook Nuclear Science	\$21
	Charts, $28 \times 41$ cm	
71960-04	Nuclear Science Teacher's Guide	\$19
	(100 pages)	

<sup>\*</sup> Available from Science Kit, 777 East Park Drive, Tonawanda, NY 14150 USA, Telephone: (800) 828-7777, Fax: (716) 874-9572, http://www.sciencekit.com/

#### 17. PHYSICAL REVIEW C FACTS, S. M. Austin

At present PRC publishes nearly half of the refereed papers (excluding conference proceedings) in nuclear physics, worldwide. In 1997, 69% of the manuscripts received were from outside the U.S., up from 58% in 1993. Of all papers, about 67% were theoretical; about 80% were received electronically — this percentage appears to have reached a plateau; and about 75–80% were accepted for publication. The percentage of acceptances is about 5% lower than a few years ago.

PAPERS RECEIVED AND PUBLISHED OVER THE PAST YEARS:

Year	Papers Received	Papers Published	Rapids Received	Rapids Published
1986	752	611	74	48
1987	880	667	77	40
1988	826	738	70	51
1989	897	705	105	65
1990	812	713	113	85
1991	843	690	104	71
1992	911	668	119	63
1993	995	783	133	85
1994	1009	829	142	94
1995	1082	865	162	104
1996	1038	811	157	87
1997	1026	789	135	80

RAPIDS: An attempt has been made to make *Rapid Communications* attractive for important papers whose technical content makes them inappropriate for *Physical Review Letters*. Since *Physical Review C* moved Rapids to the front of the journal and increased the page limit to five pages in 1989, the number of Rapids has grown and is now about 10% of the papers published in PRC (see the chart above). Most Rapids are new submissions with a small fraction (13% in 1997) of transfers from *Physical Review Letters*. Of those submitted directly, 50-60% are published as *Rapid Communications* and another 20% (roughly) as regular articles or *Brief Reports*.

SPEED: To provide a sense of the speed of refereeing and publication, one can look at the following data (median days) for articles published in 1997.

	Submitted to	Acceptance to
	Acceptance	Cover Date
Rapid Communications	72	46
Articles + <i>Brief Reports</i> + Comments	94	78

Thus, submission to publication is slightly under four months for *Rapid Communications* and slightly under six months for other articles. These times are shorter than for other parts of the *Physical Review*.

## 18. THEORY FELLOWSHIP POSITIONS IN UNIVERSITY PHYSICS DEPARTMENTS, T. Kirk

To stimulate university interest for the support of theoretical research in the physics of relativistic heavy ion collisions, Brookhaven National Laboratory and the Riken BNL Research Center (RBRC) have initiated a joint fellowship program with universities already involved with this field of physics. In letters sent to a number of department heads on April 17, these departments were invited to collaborate in the appointment of tenure track theorists in heavy ion collision physics with half of the support costs for these positions to be covered by RBRC Fellowship funds. Each RHIC Fellow's appointment will be for 3–5 years and will require that the university identify an ongoing academic appointment that can be regularly supported following the fellowship period and be filled by a relativistic heavy ion theory faculty member.

The intention is to begin filling the fellowship appointments in the academic year 1998–99. Candidates will be required to meet the high standards of the participating departments and the RBRC. Up to ten appointments are planned for the coming year. The fellowship

program has as its long-term goal, to increase by a substantial amount, a sustained theoretical effort to develop the physics exploration and understanding of highly relativistic collisions of very heavy nuclei.

The RHIC Fellows appointed in this new program are expected to be in the forefront of this flowering of nuclear theory in the new discipline of QGP studies of very hot nuclear matter. Furthermore, by placing them in a university research environment, it is hoped they will better integrate this new discipline into the main body of physics through interactions with their theoretical and experimental colleagues in related scientific fields.

## 19. FALL 1998 TARGET DATES FOR PROPOSAL SUBMISSIONS TO THE DIVISION OF PHYSICS OF THE NSF, V. R. Brown

On the basis of the success of the target-date experiment, which was designed to improve the Division's management of proposals, and to allow us, where appropriate, to employ disciplinary panels in the merit review process, the Division of Physics will use target dates for proposal submissions for disciplinary research activities competing for FY 1999 funds (FY 1999 begins on October 1, 1998).

The two target dates of interest to DNP members are:

- Wednesday, September 30, for proposals concerning Special Programs and Conferences
- 2. Wednesday, October 14, for proposals concerning Theoretical Nuclear Physics
- 3. Wednesday, November 4, for proposals concerning Experimental Nuclear Physics

Please do not send proposals more than one month in advance of the deadline to avoid processing timing difficulties.

Other target dates in the Physics Division can be found on the NSF/Physics Division web pages "http://www.nsf.gov/mps/phy".

The above dates do not apply to proposals sent to the Physics Division in response to Foundation-wide solicitations such as the Faculty Early Career Development (CAREER) or Research Experiences for Undergraduates sites (REU). These programs have specified target or deadline dates contained in their program announcements. More information can be obtained on the NSF web pages "http://www.nsf.gov/".

## 20. ANNUAL REVIEWS OF NUCLEAR AND PARTICLE SCIENCE

The Division has continued the agreement with Annual Reviews, Inc., which will enable DNP members to obtain copies of the "Annual Review of Nuclear and Particle Science" at a 30% discount when purchased through the DNP Secretary-Treasurer, Benjamin F. Gibson, Los Alamos National Laboratory, DNP, MS B283, Los Alamos, NM 87545.

1998 Prices: The dual prices (separated by a slash) listed below correspond to USA/other countries including Canada. Volumes 12–29 and 31–41 are \$55/\$60 retail and \$38.50/\$42 for DNP members. Volumes 42 and 43 are \$59/\$64 retail and \$41.30/\$44.80 for DNP members. Volumes 44 and 45 are \$62/\$67 retail and \$43.40/\$46.90

for DNP members. Volume 46 is \$67/\$72 retail and \$46.90/\$50.40 for DNP members. Volumes 47 and 48 are \$70/\$75 retail and \$49/\$52.50 for DNP members.

Other Annual Reviews series publications are also available. A complete listing of topics and authors for the current volumes and back volumes of Annual Reviews publications may be viewed on the Annual Reviews Web Site at http://www.AnnualReviews.org. The Web Site also features a fully searchable abstracts data base for all Annual Reviews publications, which allows visitors to search by author name or key words.

Payment (payable to the Division of Nuclear Physics-APS) must accompany your order and must be in U.S. funds. California orders must add applicable sales tax. Since 1 January 1991, all orders shipped to Canada require the addition of a 7% General Sales Tax (Reg. #121449029 RT).

#### 21. FUTURE CONFERENCES

Organizers of future conferences should contact the DNP Secretary-Treasurer if they wish their conferences listed in DNP newsletters.

"Fifth International Symposium on Weak and Electromagnetic Interactions in Nuclei, WEIN'98," 14–21 June 1998, Santa Fe, New Mexico. Contact: Conference Secretary WEIN'98, MS H844, Los Alamos National Laboratory, Los Alamos, NM 87545, Telephone: 505-665-1819, Fax: 505-665-6943, email: WEIN98@lanl.gov.

"The Second International Conference on Exotic Nuclei and Atomic Masses," 23-27 June 1998, Shanty Creek Resort, Bellaire, Michigan. Organizers: Cary Davids (davids@anl.gov), Brad Sherrill (sherrill@nscl.msu.edu), WWW: http://www.nscl.msu.edu/conferences/ENAM98.

Workshop on "Applications of High-Precision Gamma-Spectroscopy," 1–3 July 1998, University of Notre Dame, Notre Dame, IN. Organizers: Ani Aprahamian (Notre Dame) and Michael Jentschel (Institute Laue Langevin). Contact: Dr. Ani Aprahamian, Department of Physics, University of Notre Dame, Notre Dame, IN 46556, Telephone: 219-631-8120, Fax: 219-631-5952, email: aprahamian.1@nd.edu, WWW: http://www.nd.edu/~gammawrk.

"Nuclear Structure '98," 10–15 August 1998, Gatlinburg, TN. Host: Physics Division of Oak Ridge National Laboratory, Contact: Cyrus Baktash, e-mail: NS98@mail.phy.ornl.gov, Conference Secretary: Ms. Jackie B. Smith, Telephone: 423-574-4102, Fax: 423-574-8902

"20th International FEL98 Conference," 16-21 August 1998, Williamsburg, Virginia. Contact: Susan Ewing, email: fel98@jlab.org, WWW: http://www.jlab.org/general/cal/fel98 html

"Mesons & Light Nuclei," 31 August – 4 September 1998, Prague-Pruhonice, Czech Republic. Organized by the Institute of Nuclear Physics, Academy of Sciences of the Czech Republic, Rez. Contact: J. Mares (Local Organizing Committee Chairman), Conference Secretary: Ms. J. Novotna, Conference Address: Mesons & Light Nuclei 98, Institute of Nuclear Physics AVCR, 250 68 Rez/Prague, Czech Republic, Telephone: +420-2-687 5486, Fax: +420-2-685 7003, e-mail: m98@ujf.cas.cz, WWW: http://gemma.ujf.cas.cz/m98.

"Fifteenth International Conference on the Application of Accelerators in Research and Industry," 4-7 November 1998, University of North Texas, Denton, TX. Contact: Barbie Stippec, P.O. Box 305370, Denton, TX 76203-5370, Telephone: 940-565-3252, Fax: 940-565-2227, e-mail: stippec@unt.edu, WWW: http://www.phys.unt.edu/accelcon/.

"1998 NUCLEAR SCIENCE SYMPOSIUM AND MEDICAL IMAGING CONFERENCE," 8-14 November, 1998, Westin Harbour Castle Hotel, Toronto, Ontario, Canada. Contacts: Craig Woody (nss98@bnl.gov), Stan Majewski (nss98@jlab.org), Les Rogers (ieee.mic98@umich.edu), WWW: www.nss98.bnl.gov.

"KEK-Tanashi International Symposium on "Physics of Hadrons and Nuclei," 14–17 December 1998, Hongo Campus of the University of Tokyo, sponsored by KEK-Tanashi and the JSPS. Contact: Prof. Osamu Morimatsu, High Energy Accelerator Research Organization (KEK), Tanashi Branch, 3-2-1 Midori-cho, Tanashi, Tokyo 188, Japan, Telephone: 81-424-69-9534, Fax: 81-424-62-0763, e-mail: osamu.morimatsu@kek.jp

"International Symposium on Nuclear Electro-Weak Spectroscopy (NEWS 99) for Symmetries and Electro-Weak Nuclear-Processes," 9–12 March 1999, at the RCNP (Research Center for Nuclear Physics), Osaka, Japan. Contact: Dr. K. Takahisa, RCNP, Osaka University, Mihogaoka 10-1, Ibaraki, Osaka 567-0047, Japan, Telephone: +81-6-879-8895, Fax: +81-6-879-8899, e-mail. news99@rcnp.osaka-u.ac.jp, WWW: http://www.rcnp.osaka-u.ac.jp/~news99.

"Tenth International Symposium on Reactor Dosimetry," 12–17 September 1999, Osaka, Japan. Contact: D. W. Vehar, Sandia National Laboratories, MS-1142, P. O. Box 5800, Albuquerque, NM 87185-1142, Telephone: 505-845-3414, Fax: 505-844-0798, e-mail: dwvehar@sandia.gov, WWW: www.sandia.gov/events/isrd99.

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